



2834

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Signature	
Date	October 7, 2003

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McGraw-Hill DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS

Fourth Edition

Sybil P. Parker

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EXHIBIT A

On the cover: Pattern produced from white light by a computer-generated diffraction plate containing 529 square apertures arranged in a 23 x 23 array. (R. B. Hoover, Marshall Space Flight Center)

On the title pages: Aerial photograph of the Sinai Peninsula made by Gemini spacecraft. (NASA)

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McGraw-Hill Dictionary of Scientific and Technical Terms, Fourth Edition

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sodium thiopental [PHARM] $C_{11}H_{17}N_2O_2SNa$ A yellowish-white powder, soluble in water and alcohol; used in medicine as a barbiturate. { 'söd-ê-əm ,thi-ə'pent-əl }

sodium thiosulfate [INORG CHEM] $Na_2S_2O_3 \cdot 5H_2O$ White, translucent crystals or powder with a melting point of 48°C; soluble in water and oil of turpentine; used as a fixing agent in photography, for extracting silver from ore, in medicine, and as a sequestrant in food. Also known as sodium hyposulfite; sodium trisulfite. { 'söd-ê-əm ,thi-ə'səl,fāt }

sodium trichloroacetate [ORG CHEM] CCl_3COONa A toxic material, used in herbicides and pesticides. Abbreviated sodium TCA. { 'söd-ê-əm trī'klôr-ō'as-ə,tāt }

sodium 2,4,5-trichlorophenolate [ORG CHEM] $C_6H_2Cl_3ONa \cdot 1\frac{1}{2}H_2O$ Buff to light brown flakes, soluble in water, methanol, and acetone; used as a bactericide and fungicide. { 'söd-ê-əm 'tū ,fôr 'fiv trī'klôr-ō'fe,nāt }

sodium tripolyphosphate [INORG CHEM] $Na_3P_3O_{10}$ A white powder with a melting point of 622°C; used for water softening and as a food additive and texturizer. Abbreviated STPP. { 'söd-ê-əm trī,pāl-i'fä,sfāt }

sodium tungstate [INORG CHEM] $Na_2WO_4 \cdot 2H_2O$ Water-soluble, colorless crystals; lose water at 100°C, melts at 692°C; used as a chemical intermediate analytical reagent, and for fireproofing. Also known as sodium wolframate. { 'söd-ê-əm 'təŋ,stāt }

sodium tungstophosphate [INORG CHEM] Approximately $2Na_2O \cdot P_2O_5 \cdot 12WO_3 \cdot 18H_2O$ A yellowish-white powder, soluble in water and alcohols; used to manufacture organic pigments, as an antistatic agent for textiles, in leather tanning, and as a water-resistant agent in plastic films, adhesives, and cements. Also known as sodium phosphotungstate. { 'söd-ê-əm 'twelv 'təŋ'stō'fä,sfāt }

sodium undecylenate [ORG CHEM] $C_{11}H_{19}O_2Na$ A white, water-soluble powder that decomposes above 200°C; used in cosmetics and pharmaceuticals as a bacteriostat and fungistat. { 'söd-ê-əm ,ən,də'sə'le,nāt }

sodium-vapor lamp [ELECTR] A discharge lamp containing sodium vapor, used chiefly for outdoor illumination. { 'söd-ê-əm 'vā-pər 'lamp }

sodium wolframate See sodium tungstate. { 'söd-ê-əm 'wul-frə,mīt }

sodium xanthate See sodium ethylxanthate. { 'söd-ê-əm 'zan,thāt }

sodium xanthogenate See sodium ethylxanthate. { 'söd-ê-əm zan'thā-jə,nāl }

sofar [NAV] A system of fixing a position at sea by exploding a charge under water, measuring the time for the shock waves to travel through water to three widely separated shore stations, and calculating the position of the explosive by triangulation; the explosive can be dropped from a lifeboat by survivors of air or sea disasters. Derived from sound fixing and ranging. { 'sō,fär }

soffione [GEOL] A jet of steam and other vapors issuing from the ground in a volcanic area. { 'sā-fē'ō-nē }

soffit [CIV ENG] The underside of a horizontal structural member, such as a beam or a slab. { 'sāf-ət }

soffoslan knob See frost mound. { sō'fō-zhən 'nāb }

soft automation [ENG] Automatic control, chiefly through the use of computer processing, with relatively little reliance on computer hardware. { 'sōft ,ōd-ə'mā'shən }

soft cataract [MED] A cataract, affecting the cortex of the lens of the eye, which is of soft consistency and has a milky appearance. { 'sōft 'kad-ə,rakt }

soft chancre See chancroid. { 'sōft 'shəŋ-kər }

soft coal See bituminous coal. { 'sōft 'kōl }

soft copy [COMPUT SCI] Information that is displayed on a screen, given by voice, or stored in a form that cannot be read directly by a person, as on magnetic tape, disk, or microfilm. { 'sōft 'kāp-ē }

soft-copy terminal [COMPUT SCI] A computer terminal that presents its output through an electronic display, rather than printing it on paper. { 'sōft 'kāp-ē 'tərmən-əl }

soft coral [INV ZOO] The common name for coelenterates composing the order Alcyonacea; the colony is supple and leathery. { 'sōft 'kār-əl }

soft crash [COMPUT SCI] A halt in computer operations in which the computer operator has enough warning time to take action to minimize the effects of the stoppage. { 'sōft 'krash }

soft dot [GRAPHICS] A dot on a screened halftone with an

excessive fringe having an area almost as large as the dot itself. { 'sōft 'dāt }

soft edit [COMPUT SCI] A checking and correction process that allows data in which problems have been identified to be accepted by a computer system. { 'sōft 'ed-īt }

softening agent [MATER] 1. A substance that is added to another substance to increase softness; for example, stearic acid added to plastics, fat-liquoring agents to leather, and fatty alcohol to fabrics. 2. A chemical that softens hard water by removing or trapping calcium and magnesium ions. { 'sōf-ən-ŋ ,ā-jənt }

softening point [PHYS] For a substance which does not have a definite melting point, the temperature at which viscous flow changes to plastic flow. { 'sōf-ən-ŋ ,pōint }

softening range [PHYS] The temperature range in which material without a melting point goes from a rigid to a soft condition. { 'sōf-ən-ŋ ,rāŋj }

soft error [COMPUT SCI] An error that occurs in automatic operations but does not recur when the operation is attempted a second time. { 'sōft 'er-ər }

soft failure [COMPUT SCI] A failure that can be overcome without the assistance of a person with specialized knowledge to repair the device. { 'sōft 'fāl-yər }

soft ground [MIN ENG] 1. A mineral deposit which can be mined without drilling and shooting hard rock. 2. The rock about underground openings that does not stand well and requires heavy timbering. { 'sōft 'grāund }

soft hail See snow pellets. { 'sōft 'hāl }

soft hammer [ENG] A hammer having a head made of a soft material, such as copper, lead, rawhide, or plastic; used to prevent damage to a finished surface. { 'sōft 'ham-ər }

soft-iron ammeter [ENG] An ammeter in which current in a coil causes two pieces of magnetic material within the coil, one fixed and one attached to a pointer, to become similarly magnetized and to repel each other, moving the pointer; used for alternating-current measurement. { 'sōft 'ī-rən 'am,ēd-ər }

soft landing [AERO ENG] The act of landing on the surface of a planet or moon without damage to any portion of the vehicle or payload, except possibly the landing gear. { 'sōft 'land-ŋ }

soft limiting [ELECTR] Limiting in which there is still an appreciable increase in output for increases in input signal strength up into the range at which limiting action occurs. { 'sōft 'lim-əd-ŋ }

soft magnetic material [ELECTROMAG] A magnetic material which is relatively easily magnetized or demagnetized. { 'sōft mag'net-ik mə'tir-ē-əl }

soft missile base [CIV ENG] A missile-launching base that is not protected against a nuclear explosion. { 'sōft 'mis-əl ,bās }

soft palate [ANAT] The posterior part of the palate which consists of an aggregation of muscles, the tensor veli palatini, levator veli palatini, azygos uvulae, palatoglossus, and palatopharyngeus, and their covering mucous membrane. { 'sōft 'pal-ət }

soft patch [COMPUT SCI] A temporary change in a computer program's machine language that is carried out while the program is in memory, and thus prevails only for the duration of a single run of the program. [ENG] A patch in a crack in a vessel such as a steam boiler consisting of a soft material inserted in the crack and covered by a metal plate bolted or riveted to the vessel. { 'sōft 'pach }

soft phosphate [MATER] Powdery, impure tricalcium phosphate separated in fertilizer manufacture from rock and pebble phosphates. { 'sōft 'fä,sfāt }

soft point [ORD] A bullet with a soft point, intended to spread upon striking a target with some resistance, such as the flesh of game; not permitted in combat operations. { 'sōft 'pōint }

soft radiation [PHYS] Radiation whose particles or photons have a low energy, and, as a result, do not penetrate any type of material readily. { 'sōft ,rād-ē'ā'shən }

soft rime [HYD] A white, opaque coating of fine rime deposited chiefly on vertical surfaces, especially on points and edges of objects, generally in supercooled fog. { 'sōft 'rim }

soft rock [MIN ENG] Rock that can be removed by air-operated hammers, but cannot be handled economically by a pick. [PETR] 1. A broad designation for sedimentary rock. 2. A rock that is relatively nonresistant to erosion. { 'sōft 'rāk }

soft rot [PL PATH] of plant parts caused by a fungus

soft rubber [MAT] by adding 0.5 to 8 { 'sōft 'rāb-ər }

soft sector [COMI] the locations of sectors written on the storage means. { 'sōft 'se }

soft-shell disease by a chitinous bacterium. { 'sōft 'se }

soft shower [NUC] penetrate 6 to 8 inches mainly of electrons

soft solder [MET] tin. Also known as

soft soldering [M] 'sād-ər-ŋj }

soft tube [ELECTR] about 0.000002 atmosphere, the remaining penetrating rays through the tube. 2. See gassy

software [COMPUT] particular kind of code associated with a computer, and operating software compatible with respect which a source program will compile and execute in the other. { 'sōf }

software driver [C] handle the interactive equipment, changing { 'sōf ,wer 'driv-ər }

software engineering the application of scientific and engineering principles to the design, development, and testing of computer programs, systems, and test methods. { 'sōf ,wer 'en-jə'nir-ŋj }

software flexibility change easily in requirements. { 'sōf ,wer 'fleks-ə-bəl-ə-ti }

software floating point allow high-level programming point arithmetic on arithmetic. { 'sōf ,wer 'float-ŋj }

software interface whereby computer program and one language { 'sōf ,wer 'int-ər-fās }

software maintenance errors in software system running the software

software monitor [C] the performance of a counting package, but of various components of the control program

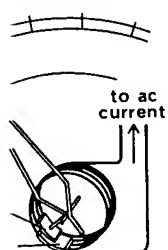
software multiplexing time-sharing or multiplexing unit, acting interleaves its attention for service, in such a way that it is processed in parallel.

software package [C] some specific function than one computer user. { 'sōf ,wer 'pāk-ŋj }

software path length machine-language instruction task. Also known as

software piracy [C] the unauthorized copying of software for personal or commercial use.

IRON AMMETER



of the repulsion-type ammeter showing the movable pieces of material.